

CLAIMS

What is claimed is:

- 1 1. An object retention system for securing an object in a rotatable
2 carousel having an axis of rotation, the system comprising:
3 (a) a latching hub mounted within the rotatable carousel about
4 the axis of rotation;
5 (b) at least one object within the rotatable carousel, each object
6 having a latch reciprocal configured to mate with the latching hub; and,
7 (c) at least one retainer adjacent each object, each retainer
8 configured to maintain contact between one of the latch reciprocals and the
9 latching hub.
- 1 2. The system of claim 1 wherein:
2 (a) the latching hub includes at least one prominence; and
3 (b) each latch reciprocal has a depression formed therein for
4 receiving one of the prominences of the latching hub.
- 1 3. The system of claim 1 wherein:
2 (a) each latch reciprocal includes a prominence; and
3 (b) the latching hub has at least one depression formed therein
4 for receiving the prominence of each latch reciprocal.
- 1 4. The system of claim 1 wherein each retainer is springable to permit
2 insertion and removal of each object.
- 1 5. The system of claim 1 wherein the latching hub is springable to
2 permit insertion and removal of each object.

1 6. The system of claim 1 wherein the latching hub is substantially
2 coextensive with each object.

1 7. The system of claim 1 wherein each object includes first and
2 second ends and wherein the latch reciprocal of each object is positioned
3 centrally between the first and second ends of each object.

1 8. A method for securing an object in a rotatable carousel having an
2 axis of rotation, the method comprising:

3 (a) mounting a latching hub within the rotatable carousel about
4 the axis of rotation;
5 (b) providing a retainer within the rotatable carousel;
6 (c) inserting an object, having a latch reciprocal, into the
7 rotatable carousel;
8 (d) mating the latch reciprocal with the latching hub; and,
9 (e) the retainer maintaining contact between the latch reciprocal
10 and the latching hub.

1 9. The method of claim 8 further including:
2 (a) providing the latching hub with a prominence; and
3 (b) forming a depression in the latch reciprocal for receiving the
4 prominence of the latching hub.

1 10. The method of claim 8 further including:
2 (a) providing each latch reciprocal with a prominence; and
3 (b) forming a depression in the latching hub for receiving the
4 prominence of the latch reciprocal.
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1 11. The method of claim 8 wherein inserting the object includes:
2 (a) the object displacing the retainer, permitting the latch

3 reciprocal to partially bypass the latching hub;
4 (b) the retainer returning to lock the latching hub against the
5 latch reciprocal.

1 12. The method of claim 8 wherein inserting the object includes:
2 (a) displacing the latching hub, permitting the latch reciprocal to
3 partially bypass the latching hub;
4 (b) the latching hub returning to lock the latching hub against
5 the latching reciprocal.

1 13. An object retention system for retaining an object on a rotatable
2 carousel, the system comprising:
3 (a) a rotatable carousel having an axis of rotation;
4 (b) a latching hub mounted within the rotatable carousel about
5 the axis of rotation;
6 (c) an object within the rotatable carousel and having a latch
7 reciprocal and a stop, the latch reciprocal configured to mate with the latching
8 hub; and,
9 (d) at least one retainer mounted within the carousel adjacent
10 the stop, each retainer configured to maintain contact between the latch
11 reciprocal and the latching hub.

1 14. The system of claim 13 wherein:
2 (a) the latching hub includes a prominence; and
3 (b) the latch reciprocal has a depression formed therein for
4 receiving the prominence of the latching hub.

1 15. The system of claim 13 wherein:
2 (a) the latch reciprocal includes a prominence; and
3 (b) the latching hub has a depression formed therein for
4 receiving

5 the prominence of the latch reciprocal.

1 16. The system of claim 13 wherein each retainer is springable to
2 permit insertion and removal of each object.

1 17. The system of claim 13 wherein the latching hub is springable to
2 permit insertion and removal of each object.

1 18. The system of claim 13 wherein the latching hub is substantially
2 coextensive with the object.

1 19. The system of claim 13 wherein the object includes first and
2 second ends and wherein the latch reciprocal is positioned centrally between the
3 first and second ends of the object.